# A Study Concerning the Promotion of Migration to Regions outside the Three Major Metropolitan Areas and the Activation of Endogenous Employment Creation by Using Migrants\*

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The objectives of this study are (A) to consider the promotion of migration from Japan's three major metropolitan areas to regions outside those areas, and (B) to examine the potential for the activation of endogenous employment creation in regions outside the three major metropolitan areas, using those migrants. The issues behind this are concerns that, due to external diseconomies and other factors, population decrease in regions outside the three major metropolitan areas and economic disparities with the three major metropolitan areas will not be resolved smoothly, unless some form of policy is put in place. The factors inhibiting migration include work-related aspects and aspects relating to relocation; with regard to (A), methods of increasing the probability of finding a job and the probability of being able to relocate are discussed. Moreover, with regard to (B), this paper discusses matters such as what kind of companies located in regions outside the three major metropolitan areas value migrants highly and what kind of migrants are valued. The results obtained from this study imply what kind of responses are possible in order to resolve the aforementioned problems in regions outside the three major metropolitan areas.

#### I. Introduction

In recent years, economic disparities between the three major metropolitan areas and regions outside the three major metropolitan areas have continued to expand, as a result of which, the population exodus from the latter has showed no sign of diminishing. The economic disparities between the three major metropolitan areas and other regions have existed for quite a long time, and the situation of excessive population outflow from those other regions has continued for more than the last ten years.

Why has this situation occurred? If it conformed to the arguments of standard economic theory, the existence of economic disparities would be resolved through the migra-

<sup>\*</sup> This study is a considerably scaled-down version of Japan Institute for Labour Policy and Training (2011). Accordingly, please refer to that study for a detailed discussion of the issues. This paper focuses solely on the major discussion points. Section III was written by Igawa, while the rest was written by Otani.

As explained below, the term "the three major metropolitan areas" refers to the areas centering on the three metropolises of Tokyo, Osaka and Aichi (the region with Nagoya as its capital), while the term "regions outside the three major metropolitan areas" refers to all regions outside those areas.

tion of people or companies, and the population exodus should also be curbed as a result of the elimination of those economic disparities.

The causes of this situation are the fact that the population exodus is accompanied by external diseconomies (Genda, Oi and Shinozaki 2005), and the fact that the expansion of companies into regions outside the three major metropolitan areas has not yet progressed sufficiently (Higuchi (2005). If the problems of economic disparities between the three major metropolitan areas and other regions, and population exodus, which are two sides of the same coin, are not resolved smoothly through market mechanisms, some form of policy-based response will be necessary.

Hitherto, response measures adopted in this kind of situation have included such methods as government-funded employment creation initiatives and measures to attract companies to specific areas. However, in light of the necessity of fiscal reconstruction and the advance of globalization, there are limits to the extent to which both of these means can continue to be used in the future. Therefore, it will become important to consider some form of alternative.

Accordingly, this study examines measures for promoting migration to regions outside the three major metropolitan areas and the potential for the activation of endogenous employment creation in these regions by using migrants, from the perspective that promoting such migration could contribute to curtailing and resolving the problems of economic disparities and population decline.

Considering the former issue not only directly relates to the problem of population decline in regions outside the three major metropolitan areas, but could also lead to an improvement in employment conditions through an increase in consumption within each region. If consideration of the latter issue demonstrates that migrants can also be of use in endogenous employment creation, it can be anticipated that the promotion of migration would curtail and resolve economic disparities through this kind of effect.

In this study, the three areas centering on major metropolises listed in Table 1 as "4. Southern Kanto," "6. Tokai" and "8. Keihanshin" are deemed to be the "three major metropolitan areas," while regions outside those areas are deemed to be "regions outside the three major metropolitan areas."

The structure of this study is as follows. The next section discusses what kind of responses would be possible in order to promote migration from the three major metropolitan areas to other regions. Section III examines the potential for the activation of endogenous employment creation in regions outside the three major metropolitan areas by using migrants. Finally, section IV summarizes and provides a conclusion regarding the results obtained hitherto in this paper.

Table 1. Categorization of the Three Major Metropolitan Areas and Regions outside the Three Major Metropolitan Areas

- 1. Hokkaido (Hokkaido only)
- 2. Tohoku (Aomori, Iwate, Miyagi, Akita, Yamagata, Fukushima)
- 3. Kita-Kanto, Koshin (Ibaraki, Tochigi, Gunma, Yamanashi, Nagano)
- 4. Minami-Kanto (Saitama, Chiba, Tokyo, Kanagawa)
- 5. Hokuriku (Niigata, Toyama, Ishikawa, Fukui)
- 6. Tokai (Gifu, Shizuoka, Aichi, Mie)
- 7. Kinki (Shiga, Nara, Wakayama)
- 8. Keihanshin (Kyoto, Osaka, Hyogo)
- 9. Sanin (Tottori, Shimane)
- 10. Sanyo (Okayama, Hiroshima, Yamaguchi)
- 11. Shikoku (Tokushima, Kagawa, Ehime, Kochi)
- 12. Kita-Kyushu (Fukuoka, Saga, Nagasaki, Oita)
- 13. Minami-Kyushu, Okinawa (Kumamoto, Miyazaki, Kagoshima, Okinawa)

# II. Concerning the Promotion of Migration from the Three Major Metropolitan Areas to Regions outside the Three Major Metropolitan Areas

This section discusses what kind of policies would be effective in promoting migration from the three major metropolitan areas to other regions.

Studies of interregional migration in Japan have been conducted previously, but most of these looked at the migration patterns between regions and the factors regulating that migration, and there were hardly any studies that narrowed down the focus to what could be done to promote migration.<sup>2</sup>

In considering measures to promote migration, the method adopted involves focusing on those wishing to migrate from the three major metropolitan areas to other regions, and comparing the difference between those who have already achieved this migration and those who have not. However, as there are no data that make such a comparison possible, a questionnaire survey has been carried out of those who have already migrated and those who wish to do so but have not yet done so. The survey results have been collated and consolidated into a form that permits comparison, and the resultant data are analyzed.

As the factors inhibiting migration can be broadly categorized into work-related issues and issues relating to relocation, the factors involved in finding a job and the factors involved in realizing relocation are analyzed.

Firstly, this section provides an explanation of the data used in the analysis. This is followed by empirical analysis; and finally, this section is summarized.

<sup>&</sup>lt;sup>2</sup> Studies dealing with interregional migration patterns include the aforementioned Genda, Oi and Shinozaki (2005). Studies that analyzed the factors regulating migration include Inoki and Suruga (1981).

### 1. Data Used

The data used in the analysis here form part of the data obtained from surveys of those who have migrated and those who have not,<sup>3</sup> and consist of data from those who wish to migrate from the three major metropolitan areas to other regions, focusing on those who have already achieved this migration (hereinafter referred to as "migrants") and those who have not yet achieved it (hereinafter referred to as "would-be migrants").

To define it in greater detail, the category of "migrants" signifies those people wishing to migrate from the three major metropolitan areas to other regions, who are (a) "those who have both been hired by a company and have relocated already." In contrast, the category of "would-be migrants" consists of two groups: those people wishing to migrate from the three major metropolitan areas to other regions, who are either (b) "those who have already found a job, but have not yet relocated," or (c) "those who have not yet found a job or relocated."

Consequently, by comparing groups (b) and (c), it becomes possible to identify the factors involved in finding a job, while comparing groups (a) and (b) allows the factors involved in realizing relocation to be examined. Comparing these groups in this way makes it possible to distinguish properly between factors involved in realizing relocation and factors involved in finding a job, while considering the factors promoting and inhibiting migration.

## 2. Empirical Analysis

# (1) Analysis of the Factors Involved in Finding a Job

Of the factors involved in finding a job and the factors involved in realizing relocation, this section firstly examines the former. In beginning to analyze the factors involved in finding a job, it is first of all necessary to obtain estimates of desired annual income. <sup>4</sup> This is because, although it is thought that desired annual income should be used as an independent variable when considering the factors involved in finding a job, it is not the case that the desired annual income of all those in groups (b) and (c) is visible.

Those whose desired annual income is not visible are, firstly, all of those who belong to group (b). This is because this group was not asked the question about desired annual income in the first place. Secondly, there are those in group (c) who did not respond in specific terms about their desired amount. Those in group (c) were asked the question about desired annual income, but there were those who responded "I don't have a particular preference," rather than answering with a specific desired amount, so their desired annual income is not visible.

As the desired annual income of those in group (b) is not visible, it is not possible to use them as a sample in estimating desired annual income. Consequently, those who are not in group (b), that is to say, those in groups (a) and (c), will be used as a sample. Those in

<sup>&</sup>lt;sup>3</sup> For details of the actual questionnaire, please see Otani (2010a).

<sup>&</sup>lt;sup>4</sup> This refers to the annual income that the individual wishes to receive in the job in the prefecture to which they have relocated, at a point in time before relocating.

group (c) were asked about desired annual income, as described above, and those in group (a) were also asked about desired annual income in the same way as those in group (c). In other words, the desired annual income of all those in groups (a) and (c) is visible, except in the case of those who responded "I don't have a particular preference."

However, if only those in groups (a) and (c) whose desired annual income is visible are used in making estimates, a bias will arise in the estimated values. This is because there are variations in attributes that cannot be observed between those who had (have) a desired annual income and those who did (do) not, so it is thought that these have an impact on desired annual income.<sup>5</sup>

Accordingly, the Heckman two-stage estimation procedure has been used, with an estimate concerning whether or not there was a desired annual income being carried out in the first-stage estimation, and an estimate of the desired annual income function being carried out as the second-stage estimation. By doing so, it is hoped to obtain estimated values for desired annual income. <sup>6</sup>

Let us now provide a more concrete explanation of the estimation of desired annual income. The more interesting part of this estimate is the second-stage estimation, so we would like to focus on an explanation of this.

The dependent variable is desired annual income.<sup>7</sup> What we would like to focus on here are the "reasons for relocation" dummy variables, which are the independent variables. More specifically, these are the "to take over the family business" dummy, the "because I like that prefecture or region" dummy, the "because the housing conditions are good" dummy, the "because I have many relatives/friends/acquaintances there" dummy, and the "because it is a good environment in which to bring up children" dummy.<sup>8</sup>

The reasons for relocation may include aspects that try to compensate for any decrease in the utility level based on lower annual income in the place to which a migrant re-

<sup>&</sup>lt;sup>5</sup> Whereas the survey of migrants asks about matters in the past, the survey of would-be migrants asks about their thoughts at the time of the survey. Consequently, the expressions appropriate to the would-be migrants are given in brackets, along with those appropriate to the actual migrants, in the form "had (have) a desired annual income." The same approach is adopted in all cases described hereinafter.

 $<sup>^{6}</sup>$  The authors have referred to Higuchi, Kurosawa, Ishii, and Matsuura (2006) regarding the aforementioned method.

<sup>&</sup>lt;sup>7</sup> These are figures derived by expressing the median value for the amount of desired annual income selected from among twenty options as both a logarithm and in real terms. However, the responses "Less than 1 million yen" and "10 million yen or more," which were the minimum and maximum values in the questionnaire, were set at 700,000 yen and 13 million yen respectively before being expressed as a logarithm and in real terms. The reason why the figures are also expressed in real terms is that, as well as the fact that the questionnaire asks about desired annual income at a point before relocation, the precise point in time before relocation differs according to each individual (however, the point in time before relocation in the case of those belonging to group (c) is the same, as it is deemed to be the point at which the survey was carried out, in each case).

 $<sup>^{8}</sup>$  Each of the reasons for relocation dummy variables takes the value 1 if that reason for relocation is applicable and 0 if it is not.

locates, so if those reasons could be identified, there is a possibility that policy-based approaches could be used to guide desired annual income downwards. Moreover, if the analysis of the factors involved in finding a job carried out below shows that it is easier to find a job, the lower one's desired annual income is, this will also lead to a discovery of the potential of a policy-based approach being used to increase the probability of finding a job. On these grounds, we focus on examining the reasons for relocation.

In addition, although it is not possible to predict which of the reasons for relocation will have a compensatory effect, it can be expected that the coefficient of those with a compensatory effect will be negative.

Other than the reasons for relocation, the independent variables that have been used are the "permanent employee before relocation" dummy, the "self-employed before relocation" dummy, the "non-regular employee before relocation" dummy, the "student before relocation" dummy, age before relocation and its square, the "male" dummy, the "graduated from vocational college/junior college/technical college" dummy, the "graduated from university" dummy and the "graduated from graduate school" dummy.

Next, let us touch briefly upon the first-stage estimation. The dependent variable is whether or not there is a desired annual income amount, and the dummy variable is set at 1 if there is a specific desired amount, and at 0 if there is not. In addition to the "permanent employee before relocation" dummy, the "self-employed before relocation" dummy, the "non-regular employee before relocation" dummy, the "student before relocation" dummy, age before relocation, and the "male" dummy, the independent variables that have been used are the "region as a priority" dummy<sup>9</sup> and the "married before relocation" dummy. <sup>10</sup>

The results are shown in Table 2. To explain by narrowing the focus to include only the noteworthy points, in the second-stage estimation, of the reasons for relocation, the "to take over the family business" dummy, the "because the housing conditions are good" dummy and the "because I have many relatives/friends/acquaintances there" dummy were negatively significant. Consequently, one can understand that if the individual has these reasons, the desired annual income becomes lower. That is to say, one can interpret this as meaning that a decline in the utility level due to low annual income at the relocation destination is compensated for by these reasons.

Thus, we have carried out an estimate of desired annual income. Next, let us carry out an analysis of the factors involved in finding a job, using the estimated values for desired annual income obtained in this way as the independent variable. As previously noted, groups (b) and (c) are used in the analysis of factors involved in finding a job.

The dependent variable is whether or not the individual's employment has been determined. More specifically, the dummy variable is 1 if the individual has found a job and 0 if not. Consequently, whereas it is 1 for all those belonging to group (b), it is 0 for all those

<sup>&</sup>lt;sup>9</sup> If the lifestyle in the prefecture after relocation was (is) the priority, the variable is set at 1, and if being hired for a job was (is) the priority, it is set at 0.

<sup>&</sup>lt;sup>10</sup> If the respondent was married before relocation, the variable is set at 1, and if not, it is set at 0.

Table 2. Analysis of Desired Annual Income

Desired annual income	Coef.	Z	P>z
"To take over the family business" dummy	-0.17	-2.01	0.044
"Because I like that prefecture or region" dummy	0.13	2.86	0.004
"Because the housing conditions are good" dummy	-0.12	-1.77	0.077
"Because I have many relatives/friends/acquaintances there" dummy	-0.08	-1.67	0.095
"Because it is a good environment in which to bring up children" dummy	-0.09	-1.45	0.148
"Permanent employee before relocation" dummy	0.36	3.67	0.000
"Self-employed before relocation" dummy	0.45	3.45	0.001
"Non-regular employee before relocation" dummy	-0.07	-0.70	0.483
"Student before relocation" dummy	0.23	1.80	0.072
Age before relocation	0.06	3.95	0.000
Age before relocation squared	-0.001	-3.30	0.001
"Male" dummy	0.20	4.04	0.000
"Graduated from vocational college/junior college/technical college" dummy	0.03	0.37	0.709
"Graduated from university" dummy	0.11	1.78	0.075
"Graduated from graduate school" dummy	0.22	2.39	0.017
Constant term	-0.26	-0.85	0.396
Whether or not there is a desired annual income amount			
"Permanent employee before relocation" dummy	0.11	0.38	0.705
"Self-employed before relocation" dummy	-0.13	-0.35	0.727
"Non-regular employee before relocation" dummy	0.27	0.81	0.415
"Student before relocation" dummy	-0.75	-2.21	0.027
Age before relocation	-0.01	-1.65	0.098
"Male" dummy	-0.14	-0.86	0.388
"Region as a priority" dummy	-0.23	-1.68	0.093
"Married before relocation" dummy	0.34	1.97	0.048
Constant term	1.51	3.50	0.000
Number of obs	472		
Wald chi2	209.60		
Prob > chi2	0.00		
Log likelihood	-403.59		

in group (c).

What we would like to focus on here is the coefficient for desired annual income (estimated value), which is the independent variable. It is thought that the higher the desired annual income, the harder it is for an individual to find a job, so the expected coefficient will be negative.

The other independent variables that have been used are the "permanent employee

Table 3. Analysis	of the Factors	Involved in	Finding a Job

	Coef.	Z	P>z
Desired annual income (estimated value)	-1.60	-2.79	0.005
"Permanent employee before relocation" dummy	0.66	2.10	0.036
"Self-employed before relocation" dummy	1.29	3.32	0.001
"Non-regular employee before relocation" dummy	-0.20	-0.73	0.467
"Student before relocation" dummy	0.86	2.68	0.007
Age before relocation	0.02	2.28	0.023
"Male" dummy	0.40	2.03	0.042
"Graduated from vocational college/junior college/technical college" dummy	0.17	0.73	0.468
"Graduated from university" dummy	0.59	2.96	0.003
"Graduated from graduate school" dummy	1.18	4.17	0.000
Active opening ratio at the relocation destination	0.01	1.27	0.203
Constant term	0.13	0.22	0.828
Number of obs	446		
LR chi2	42.49		
Prob > chi2	0.00		
Pseudo R2	0.07		

before relocation" dummy, the "self-employed before relocation" dummy, the "non-regular employee before relocation" dummy, the "student before relocation" dummy, age before relocation, the "male" dummy, the "graduated form vocational college/junior college/technical college" dummy, the "graduated from university" dummy, the "graduated from graduate school" dummy, and the active opening ratio at the relocation destination.

The results are shown in Table 3. Desired annual income (estimated value) was, as expected, negatively significant. In other words, this means that the lower the desired annual income, the easier it is to find a job. Consequently, if one combines this result with the result obtained in the estimate of desired annual income, one can make the following observations.<sup>11</sup>

Those who gave as their reasons for relocation "because the housing conditions are good" and "because I have many relatives/friends/acquaintances there" tended to have a lower desired annual income, and the lower the desired annual income, the easier it was for an individual to find a job. One can interpret these results as follows.

Those who believe that their housing conditions will improve or that their relatives, friends and acquaintances will increase as a result of relocation set a low desired annual income, because even if they accepted a low annual income at their relocation destination, there would be compensations for this decline in the utility level. In addition, this made it

<sup>&</sup>lt;sup>11</sup> These are observations made after narrowing down the focus to those things that are important in policy terms.

easier for them to find a job.

In that situation, in order to increase the probability of finding a job in regions outside the three major metropolitan areas, it is important to adopt a response that focuses on the points summarized in these reasons for relocation.

For example, developing and publicizing a good living environment would have the effect of increasing the number of people who would not mind a decrease in annual income, because they could enjoy a comfortable lifestyle in regions outside the three major metropolitan areas, so this would have the potential of increasing the probability of finding a job for would-be migrants. Moreover, if it were possible to enable those living in the three major metropolitan areas to make friends and acquaintances living in other regions by promoting interaction between these areas and regions, there is the potential that this would increase the probability of finding a job through the effect of increasing the number of those who are happy to accept a lower level of annual income if they had friends in the region.

## (2) Analysis of the Factors Involved in Realizing Relocation

This section considers the factors involved in realizing relocation. The sample used consists of groups (a) and (b). Whereas group (a) consists of those who have already been hired and have relocated, group (b) is composed of those who have not yet relocated, although they have found a job. Accordingly, by considering the differences between the two groups, one can identify the factors promoting and inhibiting relocation.

The dependent variable is whether or not the individual has relocated. More specifically, the dummy variable is 1 if the individual has relocated and 0 if not. Consequently, whereas it is 1 for all those belonging to group (a), it is 0 for all those in group (b).

The independent variables are the "remigration" dummy, the "homeowner before relocation" dummy, <sup>12</sup> the "in employment before relocation" dummy, the "permanent employee before relocation" dummy, the "self-employed before relocation" dummy, the "student before relocation" dummy, age before relocation, the "male" dummy, the "cohabiting with spouse before relocation" dummy, the "cohabiting with child(ren) before relocation" dummy, the "cohabiting with parent(s) before relocation" dummy, migration distance, <sup>13</sup> the "importance of environment/lifestyle" factor, the "child rearing" factor, <sup>14</sup> the "because I found a job that satisfied my requirements" dummy, the "because it is suitable for starting a business" dummy, the "to take over the family business" dummy, the "to care for a parent/parent-in-law" dummy, the "to cohabit with or live near a parent/parent-in-law" dummy, the "because I was asked to by a family member with whom I cohabit" dummy, and the "for health reasons relating to myself or a family member with whom I cohabit" dummy. <sup>15</sup>

<sup>&</sup>lt;sup>12</sup> If the individual was (is) a homeowner before relocation, the variable is 1, and if not, it is 0.

<sup>&</sup>lt;sup>13</sup> This is the distance between the prefecture before relocation and the prefecture after relocation.

<sup>&</sup>lt;sup>14</sup> Both factors were identified through factor analysis of the reasons for relocation.

<sup>&</sup>lt;sup>15</sup> The dummy variables listed from the "because I found a job that satisfied my requirements" dummy to the "for health reasons relating to myself or a family member with whom I cohabit" dum-

We would like to add a few things concerning the independent variables. Firstly, the remigration dummy is defined as the variable which is 1 if at least one of the following conditions is met, and 0 if not. A. The relocation destination prefecture is the prefecture from which the individual originally came. B. The relocation destination prefecture is the prefecture in which the individual spent the longest time until graduating from the final educational institution that they attended. C. The relocation destination prefecture is the prefecture from which the individual's spouse originally came. D. The relocation destination prefecture is the prefecture in which the individual's spouse spent the longest time until graduating from the final educational institution that they attended. Consequently, migration by those for whom the remigration dummy is 1 signifies return migration, while migration by those for whom it is 0 signifies other migration.

The expected coefficient is positive. This is because, compared with other migrants, remigrants have a relatively large amount of information about the relocation destination prefecture or region and life there, so it is thought to be easier for them to relocate.<sup>17</sup>

Moreover, the variables from the "importance of environment/lifestyle" factor to the "for health reasons relating to myself or a family member with whom I cohabit" dummy are variables relating to reasons for relocation, and they are used to control the "does/does not" relocate effect. Here, we are trying to identify the factors involved in realizing relocation by considering the differences between groups (a) and (b), but the difference between the two groups is regulated not only by the fact that they "can/cannot" relocate, but also by the fact that they "do/do not" relocate. Accordingly, it is also necessary to use factors that regulate the fact that they "do/do not" relocate as independent variables.

The reason why it is thought that the "does/does not" factor can be controlled using the variables relating to reasons for relocation is that it is thought that those who have a reason to relocate immediately do so without delay, while those who do not have such reasons do not hurry to relocate.

Let us now check the results of the analysis (see Table 4). If we explain it with a focus on what is important in policy terms, firstly, we can see that, as expected, the remigration dummy is positively significant. In other words, one can say that, it is easier for remigrants to successfully relocate, compared with others; the main factor behind this is thought to be the fact that it is easier for remigrants to relocate because they have an abundance of information about the relocation destination.<sup>18</sup>

my are dummy variables relating to the reasons for relocation. These dummy variables are those of the various dummy variables relating to the reasons for relocation which had a low level of correlation with the "importance of environment/lifestyle factor" and the "child rearing" factor.

<sup>&</sup>lt;sup>16</sup> Conditions C and D were used only in the event that the individual was (is) married prior to relocation.

<sup>&</sup>lt;sup>17</sup> Remigrants have the advantage that they can live at their parents' home, but this point is controlled using the "to cohabit with or live near a parent/parent-in-law" dummy.

<sup>&</sup>lt;sup>18</sup> In fact, it has been ascertained that, compared with others, remigrants have a great deal of information about the relocation destination region and lifestyles, culture and customs there.

Table 4. Analysis of the Factors Involved in Realizing Relocation

	Coef.	Z	P>z
Remigration dummy	0.39	2.17	0.030
"Homeowner before relocation" dummy	-0.69	-2.29	0.022
"In employment before relocation" dummy	0.39	1.39	0.163
"Permanent employee before relocation" dummy	0.00	-0.02	0.985
"Self-employed before relocation" dummy	-0.45	-1.25	0.211
"Student before relocation" dummy	0.50	0.90	0.367
Age before relocation	-0.04	-4.18	0.000
"Male" dummy	0.49	2.89	0.004
"Cohabiting with spouse before relocation" dummy	0.08	0.35	0.730
"Cohabiting with child(ren) before relocation" dummy	-0.03	-0.12	0.902
"Cohabiting with parent(s) before relocation" dummy	0.39	1.46	0.145
Migration distance	0.00	-0.39	0.694
Importance of environment/lifestyle factor	0.30	3.17	0.002
Child rearing factor	0.11	0.95	0.343
"Because I found a job that satisfied my requirements" dummy	0.38	2.32	0.020
"Because it is suitable for starting a business" dummy	-0.52	-1.74	0.081
"To take over the family business" dummy	0.42	1.54	0.123
"To care for a parent/parent-in-law" dummy	-0.26	-0.53	0.593
"To cohabit with or live near a parent/parent-in-law" dummy	0.70	3.50	0.000
"Because I was asked to by a family member with whom I cohabit" dummy	-0.45	-0.33	0.745
"For health reasons relating to myself or a family member with whom I cohabit" dummy	0.31	0.69	0.491
Constant term	0.48	1.46	0.144
Number of obs	379		
LR chi2	102.64		
Prob > chi2	0.00		
Pseudo R2	0.20		

Moreover, the "homeowner before relocation" dummy coefficient was negatively significant, there is a possibility that owning one's own home inhibits relocation.

So what kind of implications can be inferred from this? In light of the effect of the remigration dummy, it is thought that providing a diverse range of detailed information about the relocation destination to those considering relocation is important in increasing the probability of realizing relocation.

Given the effect of the "homeowner before relocation" dummy, it is thought that the probability of realizing relocation can be increased by facilitating the sale of houses owned by those wishing to relocate.

## 3. Summary

This section has considered what kind of policy-based responses will be necessary in

order to promote migration from the three major metropolitan areas to other regions. The factors promoting and inhibiting migration can be broadly categorized into work-related aspects and aspects relating to relocation, so the factors involved in finding a job and the factors involved in realizing relocation were analyzed individually.

The main results that can be derived from the analysis of factors involved in finding a job are as follows. Those who selected the options "because the housing conditions are good" and "because I have many relatives/friends/acquaintances there" as their reasons for relocation have a lower desired annual income than those who did not select those options; in addition, those with a lower desired annual income find it easier to find a job.

In light of this, in order to increase the probability of finding a job in regions outside the three major metropolitan areas, responses focused on developing and publicizing a good living environment there, and enabling those living in the three major metropolitan areas to make friends and acquaintances in other regions are important.

The following results were obtained from the analysis of factors involved in realizing relocation. Firstly, remigrants have a large amount of diverse information about the relocation destination compared with others, so it is easier for them to relocate. Consequently, it is thought that providing a diverse range of detailed information about the relocation destination to those wishing to relocate can increase the probability of realizing relocation.

Moreover, it was pointed out that there is a tendency for those who own their own homes before relocation to find it more difficult to relocate than those who do not. Consequently, one can say that it is necessary to facilitate the sale of owner-occupied houses.

These were the main results of analysis in this section. Based on these results, one can conclude that promoting interaction between the three major metropolitan areas and other regions is important in promoting migration.

We have pointed out the importance of publicizing a good living environment and enabling those living in the three major metropolitan areas to make friends and acquaintances who live in other regions, for the purpose of inducing a reduction in the desired annual income. Moreover, we have explained that, in order to enable people to successfully relocate, a diverse range of detailed information about the relocation destination is important. These requirements are to be met through interaction. Then, what specific methods can be used to promote interaction? In order to find out more about this, we would like to provide a brief introduction to an example in Shimane Prefecture. <sup>19</sup>

The prefectural government and related organizations in Shimane are working together, devoting their energies to a diverse range of projects to promote migration and settlement in the prefecture as permanent residents; from the perspective of how to promote interaction, one can see amongst these endeavors a project called "migration experience."

The migration experience program aims to create opportunities for migration and in-

<sup>&</sup>lt;sup>19</sup> The information below is based on an interview with the Hometown Shimane Settlement Foundation (Furusato Shimane Teijuu Zaidan) and the Foundation's own website.

corporates a range of types of experience, from comparatively simple ones, which focus on tourism whilst interacting with local people and those who have already migrated, to short-term visit support projects aimed at building up experience in the agriculture, forestry or fishery industries whilst staying for a few days to a week, and even full-scale industrial experience programs aimed at building up experience in the agriculture, forestry or fishery industries, or in craft-related fields, whilst staying in the area in the longer term.

As a result of the industrial experience program, which is one of the above, Shimane Prefecture has succeeded in achieving settlement by 582 of the 1,253 people accepted for experience on the program between 1996 and 2010. The term "settlement" signifies that they were living in the prefecture after the program ended, but given that there are quite a few problems involved in finding a job in industry, primarily centered around the agriculture, forestry and fishery industries, and in relocating to the agricultural communities, mountain villages and fishing villages that form the workplaces for those industries, the fact that the program has achieved a settlement rate of approximately 46% is worthy of attention.

There is a difference in that, whereas this example primarily focuses on finding employment in the agriculture, forestry or fishery industries and relocation to an agricultural community, mountain village or fishing village as a result, the preceding part of this section has focused on employment in all occupations and relocation to regions outside the three major metropolitan areas as a result. Nevertheless, we are sure that the reader has been able to gain some level of understanding of specific methods for promoting interaction and the effects thereof.

# III. Concerning the Potential for the Activation of Endogenous Employment Creation in Regions outside the Three Major Metropolitan Areas by Using Migrants

This section examines the potential for the activation of endogenous employment creation by using migrants, in regions outside the three major metropolitan areas. More specifically, we have analyzed what kind of migrants companies in these regions value and want to employ in the future, and what kind of companies in these regions value migrants and want to employ them.

This section follows the results and discussion in Otani (2010), which has already used the same data to conduct a fundamental analysis. Moreover, with a growing focus on the decentralization of power and regional economies, a considerable amount of study has been amassed concerning industry creation and employment creation in provincial areas in recent years (Japan Institute for Labour Policy and Training 2008, for example). However, there has not been a great deal of detailed statistical empirical analysis concerning migration. Consequently, this section uses surveys of companies to conduct an econometric empirical analysis of the actual status with regard to how companies in regions outside the three major

metropolitan areas value migrants and their desire to employ them. These are fact-finding studies, but they are believed to be significant.

#### 1. Data

The data used are data obtained from the questionnaire for "Survey Concerning the Employment and Utilization of Workers from Outside the Prefecture and Core Personnel in Small and Medium-sized Enterprises: Towards Facilitating the Securing of Key Personnel." The survey was conducted by post and the targets of the survey were people in charge of personnel at the headquarters of companies. 18,000 questionnaires were distributed and 3,662 valid responses were received (a response rate of approximately 20%). Of those responded companies, 2,980 companies were located in regions outside the three major metropolitan areas.

## 2. Empirical Analysis

# (1) Analysis of Whether or Not There Are Useful Migrants

Firstly, looking at the companies that have employed migrants in the last three years (fiscal 2006 - fiscal 2008), we will clarify in statistical terms what kind of companies responded that "there actually are people with useful skills and qualities that one only finds amongst migrants" (what kind of attributes the company has, and what kind of attributes the migrants that they employ have).

In making estimates, one should bear in mind that the companies that responded to the question "Of the migrants whom you have employed as permanent employees in the last three years, are there actually any with useful skills, qualities or experience that one only finds amongst migrants?" were all companies that had employed migrants. In other words, there were no responses at all from companies that had not employed migrants regarding the question "Are there any useful people?" It would be appropriate to use the Heckman two-stage probit estimation procedure to conduct estimates in light of this fact. That is to say, a probit estimate was carried out to analyze whether or not a migrant had been employed, at the first stage, and whether or not there were any useful migrants, at the second stage. At the first stage (selection), the dependent variable was set at 1 if a migrant had been employed and 0 if not, while at the second stage, the variable was set at 1 if the respondent answered that there was a useful migrant, and 0 if not (nobody useful, cannot judge at the present time, do not know).

Next, let us provide some details about the independent variables. Firstly, the attributes (age, academic background, occupation, etc.) of a migrant who has been employed are believed to have a bearing on whether or not the migrant is useful. From this, one can ascertain "what kind of attributes in a migrant that a company employed lead the

<sup>&</sup>lt;sup>20</sup> For further details of the questionnaire, refer to the aforementioned Japan Institute for Labour Policy and Training (2011) and Otani (2010b).

company to evaluate them as being useful."21

Six options were used for the age brackets at the time a migrant is employed: under 20, 20s, 30s, 40s, 50s, and 60 or over. Eight options were used for the academic background, in regard to the highest level of education attained: junior high school, high school, vocational college, junior college or technical college, university (humanities), university (sciences), graduate school (humanities), and graduate school (sciences). Nine options were used for the occupations pursued: specialist or technical post, managerial post, clerical, sales, service, security, transport or communications, manufacturing process or labor, and other. Dummy variables were created for all of these.

Moreover, the independent variables also include variables relating to the attributes of the company. In other words, from this, one can ascertain "what kind of attributes a company that values migrants as being useful has."

The variables relating to a company's attributes are the scale of the company (number of permanent employees and non-permanent employees), ordinary profit, business type, management strategy, policy on the employment of permanent employees, and awareness of the status in regard to human resource surpluses and deficiencies (status of surpluses or deficiencies of permanent employees, status of surpluses or deficiencies of core personnel).

With regard to management strategy, respondents could select up to two options per fiscal year concerning the areas emphasized in their management strategies for fiscal 2006, fiscal 2007 and fiscal 2008, selecting from amongst "diversification of business," "prioritization of business," "expansion of the scale of existing business," "reduction of the scale of existing business," "adding value to products/services," "reducing personnel costs," "maintaining the status quo," "other," and "do not know." Here, if an option was selected even just once during the three years, a dummy variable was created and set at 1.

With regard to the policy on employing permanent employees, respondents selected the most appropriate option for each fiscal year from fiscal 2006 to fiscal 2008 from amongst the following options: "policy of increasing them, with a focus on hiring new graduates," "policy of increasing them, with a focus on hiring people mid-career," "policy of maintaining the status quo," and "policy of reducing them." Here, if the same policy was maintained throughout the three years, a dummy variable was created and set at 1.

There are 16 options for business type, so in order to prevent the estimates becoming unstable due to an excess of dummy variables, a primary industry dummy, secondary industry dummy (reference group), and tertiary industry dummy were created, in line with the classification used in the national census.

Concerning awareness of the status in regard to human resource surpluses and deficiencies (status of surpluses or deficiencies of permanent employees, status of surpluses or deficiencies of core personnel), respondents were asked to select one option from "defi-

<sup>&</sup>lt;sup>21</sup> With regard to age, academic background and the occupation in which a person is employed, it is possible for a company to select multiple options if it has employed more than one migrant as a permanent employee in the last three years.

ciency," "sufficient," "surplus," and a "permanent employee deficiency" dummy was created and used, so if they selected "deficiency" from amongst these options, the variable was set at 1, and if not, it was set at 0. With regard to core personnel, respondents were asked to select one option from "sufficient" and "deficiency," and a "core personnel deficiency" dummy was created and used, so if they selected "deficiency" from amongst these options, the variable was set at 1, and if not, it was set at 0.<sup>22</sup>

Other independent variables to be noted are the "most migrants came from metropolitan areas" dummy and the proportion of migrants employed who were hired mid-career. Regarding the "most migrants came from metropolitan areas" dummy, if respondents were asked "From where did most of the migrants whom you employed as permanent employees over the last three years come?" and answered "Most came from major metropolitan areas, such as Minami-Kanto, Tokai, or Keihanshin areas," the variable was set at 1; otherwise, it was set at 0.

Furthermore, the independent variables include the route via which migrants were hired. There are 15 options, including "1. Migration fair," "2. Prefectural settlement promotion organization," and "3. Public Employment Security Office."

Let us now provide a brief summary of the variables on which this analysis focuses and the expected effects. Firstly, amongst the independent variables concerning the attributes of companies, it is expected that the "diversification of business" dummy and the "adding value to products/services" dummy, both of which relate to companies' management strategy, are positively significant. This is because it is thought that such companies are aiming to achieve growth through innovation and the development of new products and business initiatives, so they require a different way of thinking to that adopted previously, as well as creative planning that can break through the existing situation in which they have been placed. Consequently, it is anticipated that migrants (those who differ from local personnel) will be valued and utilized at such companies. Moreover, looking at the situation from this perspective, it is anticipated that this will lead to endogenous employment creation through the use of these migrants.

Next, with regard to the variables relating to the attributes of migrants, it is thought that migrants with a high level of expertise and those with abundant experience will be evaluated as being useful. One can point out the potential for such migrants to contribute to endogenous employment creation.

The main results are shown in Table 5. To summarize, it has been ascertained that migrants whose attributes include being in their 30s or 50s, being employed in managerial posts, and having graduated from vocational college are evaluated as being useful.

<sup>&</sup>lt;sup>22</sup> With regard to core personnel, the questionnaire form defined these as "permanent employees who, irrespective of their position, are in charge of core duties at your company and could not be replaced by another employee. However, this excludes the company representative."

<sup>&</sup>lt;sup>23</sup> The other options were "Regions outside the major metropolitan areas," "About 50:50 major metropolitan areas and other regions" and "Do not know."

Table 5. Analysis of Whether or Not There Are Useful Migrants

Analysis of whether or not there are useful migrants	Coef.	Z	P>z	dy/dx
Occupation pursued by the migrant employed				
Specialist or technical post	0.08	0.53	0.595	0.02
Managerial post	0.53	2.91	0.004	0.10
Clerical	0.06	0.40	0.688	0.01
Sales	-0.10	-0.59	0.558	-0.02
Service	-0.17	-0.70	0.482	-0.03
Transport or communications	-0.39	-1.32	0.188	-0.08
Manufacturing process or labor	-0.33	-1.60	0.111	-0.06
Age of the migrant employed at the time of employment				
Under 20	-0.01	-0.02	0.983	0.00
30s	0.52	4.02	0.000	0.10
40s	0.05	0.37	0.708	0.01
50s	0.55	2.86	0.004	0.11
60 or over	0.31	0.73	0.467	0.06
Highest level of education attained by the employed migrant				
High school	0.05	0.34	0.731	0.01
Vocational college	0.23	1.70	0.089	0.04
Junior college or technical college	-0.07	-0.44	0.660	-0.01
University (humanities)	-0.11	-0.80	0.423	-0.02
University (sciences)	-0.07	-0.53	0.595	-0.01
Graduate school	0.21	1.12	0.264	0.04
Employment route				
Migration fair	0.15	0.65	0.516	0.03
Prefectural settlement promotion organization	0.72	1.75	0.080	0.14
Public Employment Security Office	0.12	0.95	0.342	0.02
Private sector employment/outplacement support company	0.06	0.36	0.721	0.01
Company information session/employment seminar, etc.	-0.07	-0.40	0.686	-0.01
Own company's website	0.17	1.31	0.189	0.03
Job search/transfer magazine	0.04	0.19	0.847	0.01
Newspaper advertisement/leaflet	-0.53	-1.98	0.047	-0.10
Introduction/recommendation by an educational institution/teacher	0.08	0.47	0.638	0.02
Information introduced by a local person	0.30	1.63	0.104	0.06
Information introduced by an employee of the company	0.23	1.58	0.114	0.04
Information introduced by a client	0.08	0.38	0.705	0.02
Other employment route	-0.04	-0.14	0.885	-0.01
Management strategy				
(Reference group: "maintaining the status quo," "other," and "do not know")				
Dummy for responding "diversification of business" even just once during	0.14	0.07	0.222	0.02
the three years	-0.14	-0.97	0.332	-0.03
Dummy for responding "prioritization of business" even just once during	0.22	1.01	0.056	0.05
the three years	0.23	1.91	0.056	0.05
Dummy for responding "expansion of the scale of existing business" even	0.41	2.25	0.001	0.00
just once during the three years	0.41	3.35	0.001	0.08
Dummy for responding "reduction of the scale of existing business" even	-0.58	<b>-</b> 1.71	0.088	-0.08
	-0.58	-1./1	0.088	-0.08
just once during the three years		2.00	0.004	0.07
Dummy for responding "adding value to products/services" even just once	0.24		11 11114	0.07
For the second s	0.34	2.89	0.001	
Dummy for responding "adding value to products/services" even just once				0.02
Dummy for responding "adding value to products/services" even just once during the three years	0.34	0.54	0.592	0.02
Dummy for responding "adding value to products/services" even just once during the three years Dummy for responding "reducing personnel costs" even just once during the				
Dummy for responding "adding value to products/services" even just once during the three years Dummy for responding "reducing personnel costs" even just once during the three years	0.08	0.54	0.592	0.02 0.03 0.07

Table 5. Analysis of Whether or Not There Are Useful Migrant (*Continued*)

Whether or not the company employed a migrant	Coef.	Z	P>z
Permanent employee deficiency	0.09	0.98	0.326
Core personnel deficiency	0.29	4.70	0.000
Management strategy			
(Reference group: "maintaining the status quo," "other," and "do not know")	)		
Dummy for responding "diversification of business" even just once during the three years	0.02	0.20	0.840
Dummy for responding "prioritization of business" even just once during the three years	0.00	0.05	0.962
Dummy for responding "expansion of the scale of existing business" even just once during the three years	0.13	1.92	0.054
Dummy for responding "reduction of the scale of existing business" even just once during the three years	-0.24	-1.84	0.065
Dummy for responding "adding value to products/services" even just once during the three years	0.31	4.88	0.000
Dummy for responding "reducing personnel costs" even just once during the three years	-0.08	-1.03	0.303
Permanent employee employment policy			
(Reference group: "maintaining the status quo")			
Dummy for responding "policy of increasing them, with a focus on hiring new graduates" consistently throughout the three years (2006-2008)	0.20	2.55	0.011
Dummy for responding "policy of increasing them, with a focus on hiring people mid-career" consistently throughout the three years (2006-2008)	0.19	1.95	0.052
Dummy for responding "policy of reducing them" consistently throughout the three years (2006-2008)	-0.12	-0.75	0.452
Number of permanent employees	0.00	9.37	0.000
Number of non-permanent employees	0.00	-0.48	0.634
Ordinary profit	0.00	0.35	0.729
Primary industry	0.41	1.47	0.141
Tertiary industry	0.15	2.31	0.021
Constant term	-1.30	-12.99	0.000
Number of obs	1893		
Censored obs	1253		
Uncensored obs	640		
Wald chi2(39)	103.26		
Prob > chi2	0.00		
Log likelihood	-1420.52		

Moreover, if we look at what kind of companies value migrants, we can see that companies with a high proportion of mid-career hires amongst the migrants whom they have employed, which have the prioritization of business and which are aiming to expand their scale and add value to their products/services as their management strategy, value migrants as useful.

# (2) Analysis of the Factors Relating to the Desire to Employ Migrants in the Future

Next, we have analyzed "whether or not the company wants to employ migrants if possible, when hiring permanent employees in the future." This means looking at whether

migrants are valued as being, or are anticipated to be more desirable than local personnel.

With regard to the dependent variable, the dummy variable is set at 1 if the respondent answered "We want to employ a migrant" or "If we had to choose, we would like to employ a migrant" to the question "In the future, when hiring permanent employees, would you like to hire a migrant, or would you prefer to employ someone other than a migrant?," and at 0 if they answered anything else ("Either is fine," "If we had to choose, we would prefer to employ someone other than a migrant," or "We would like to employ someone other than a migrant").

The independent variable focused on here is "Actually useful ability." This involved respondents answering the question, "In regard to migrant employees with useful abilities unique to migrants, what specific abilities are useful? If you have multiple employees of this nature, please answer based on an average for them." Respondents were then asked to rate nine abilities on a scale of 1 to 5, according to the degree to which they were applicable. In the estimates, dummy variables were created with regard to these nine abilities, respectively, setting those answering "1. Agree" or "2. Somewhat agree" at 1 and all others at 0. Then, the dummy variables other than those showing strong mutual correlations were used as independent variables.

The abilities are "1. Their experience of having conducted sales activities or trade in regard to large companies is useful," "2. Their experience of working in a large company is useful," "3. Their connections or interpersonal networks at companies or groups outside the prefecture are useful," "4. Their qualifications are useful," "5. Their business sense, which differs from that of personnel from within the local prefecture, is useful," "6. Their high level of skill is useful," "7. Their abundant, wide-ranging knowledge is useful," "8. Their experience, which personnel from within the local prefecture do not have, is useful," and "9. Their behavior, unconstrained by local limitations, is useful."

Moreover, another question about useful skills has been used. This is a question asking "If you were to choose from the following, which specific abilities are actually useful amongst the useful abilities unique to migrants?," with respondents selecting the most applicable options from 15 possible options (multiple responses possible). Any that were chosen are set as dummy variables with a value of 1. The 15 abilities are "enthusiasm and being proactive," "being cooperative," "originality," "leadership," "sincerity and steadfastness," "ability to think logically," "ability to negotiate," "ability to take action and get things done," "sense of responsibility," "consideration for others," "communication skills," "planning ability," "management ability," "other" and "nothing in particular." These were also narrowed down to a number of variables in light of their correlation, before being included in the estimates.

Other independent variables included "the proportion of migrants who are useful."

<sup>&</sup>lt;sup>24</sup> In the case of this variable, only those companies which responded "The migrant(s) employed is (are) useful" responded. Consequently, only these companies are the target of this analysis.

Table 6. Analysis of Whether a Company Wishes to Employ a Migrant in the Future

Desire to Employ Migrants in the Future	Coef.	Z	P>z	dy/dx
Proportion of migrants who are useful	-0.07	-0.86	0.387	-0.02
Actually useful abilities				
Connections or interpersonal networks at companies or groups outside	-0.58	-1.46	0.145	-0.13
the prefecture	-0.56	-1.40	0.145	-0.13
Business sense that differs from that of personnel from within the	0.71	2.59	0.010	0.21
local prefecture				
High level of skill	-0.37	-1.23	0.217	-0.11
Actually useful abilities				
Enthusiasm and being proactive	-0.15	-0.53	0.593	-0.04
Originality	-0.14	-0.32	0.748	-0.04
Ability to think logically	0.60	2.00	0.046	0.18
Ability to take action and get things done	-0.08	-0.28	0.776	-0.02
Communication skills	-0.02	-0.05	0.957	0.00
Management ability	0.65	1.91	0.056	0.20
Management strategy for the next three years				
(Reference group: "maintaining the status quo," "other," and "do not know")				
Diversification of business	0.43	1.15	0.249	0.13
Prioritization of business	0.28	0.84	0.400	0.08
Expansion of the scale of existing business"	0.22	0.59	0.555	0.06
Reduction of the scale of existing business	0.25	0.35	0.723	0.08
Adding value to products/services	0.06	0.19	0.846	0.02
Reducing personnel costs	0.05	0.11	0.912	0.01
Employment policy for the next three years				
(Reference group: "maintaining the status quo")				-0.00
Increasing employees, with a focus on hiring new graduates	0.26	0.73	0.468	0.07
Increasing employees, with a focus on hiring people mid-career	-0.03	-0.06	0.949	-0.01
Reducing employees	0.81	1.61	0.107	0.27
Human resource development policy for the next three years				
(Reference group: "emphasizing the development of all personnel in the workpla	ice,"			
"no particular emphasis on developing one or the other," and "other")				
Emphasizing the development of permanent employees	0.11	0.30	0.764	0.03
Emphasizing the development of permanent employees who are core person	0.03	0.09	0.931	0.01
Mid-career hires as a proportion of migrants	0.28	0.70	0.484	0.08
Most migrants came from metropolitan areas	0.65	2.30	0.021	0.17
Permanent employee deficiency	-0.15	-0.36	0.721	-0.04
Core personnel deficiency	0.50	1.67	0.094	0.13
Number of permanent employees	0.00	0.45	0.655	0.00
Number of non-permanent employees	0.00	-0.86	0.389	0.00
Ordinary profit	0.00	-0.62	0.537	0.00
Primary industry	-0.09	-0.08	0.936	-0.02
Tertiary industry	-0.11	-0.39	0.700	-0.03
Constant term	-2.04	-2.67	0.008	
Number of obs	162			
LR chi2(30)	42.67			
Prob > chi2	0.06			
Pseudo R2	0.24			
Log likelihood	-69.21			

This asks about the proportion of those who have useful skills, qualities or experience only found amongst migrants, based on a five-stage categorization. Moreover, the independent variables also included the "proportion of migrants employed who were hired mid-career" and the "most migrants came from metropolitan areas" dummy.

The results of the estimate are shown in Table 6. Looking at the variables on which this focuses, we can see that "business sense that differs from that of personnel from within the local prefecture," "ability to think logically," and "management ability" are positively significant in regard to the abilities that are actually useful. This demonstrates that the companies which responded that these abilities were useful have a desire to employ migrants in the future as well. Moreover, "most migrants came from metropolitan areas" was also positively significant. With regard to other variables, "core personnel deficiency" was also positively significant. This suggests that the companies with these characteristics wish to employ migrants in the future.

If we interpret these results in terms of the attributes of migrants, we can say that this shows that people with management ability and business sense that differs from that of people from within the local prefecture, people with experience in metropolitan areas, and people who have the potential to become core personnel will be required in the future.

## 3. Summary

In this section, an econometric empirical analysis was carried out concerning the actual status of the utilization of migrants by companies located in regions outside the three major metropolitan areas, with the main focus being placed on "whether they are useful" and "whether companies would like to employ migrants in the future." This has clarified what kind of migrants companies located in these regions value and would like to employ in the future, as well as what kind of companies located in these regions value migrants and would like to employ them in the future.

#### IV. Conclusion

The objectives of this study were to consider the promotion of migration from Japan's three major metropolitan areas to regions outside those areas, and to examine the potential for the activation of endogenous employment creation in such regions by using migrants. The issues behind this were concerns that, due to external diseconomies and other factors, population decline in these regions and economic disparities with the three major metropolitan areas will not be resolved smoothly, unless a policy-based approach is adopted.

Measures adopted to deal with these problems have included government-funded employment creation initiatives and measures to attract companies to specific areas. However, in light of the necessity of fiscal reconstruction and the advance of globalization, there are limits to the extent to which both of these means can continue to be used in the future.

Based on the awareness of this problem, measures for promoting migration from the three major metropolitan areas to other regions were examined first of all. The implications inferred from this are as follows.

Firstly, one can say that it is necessary to guide desired annual income downwards in order to increase the probability of finding a job, but in order to do so, it is important to

adopt a response focused on developing and publicizing a good living environment, or enabling those living in the three major metropolitan areas to make friends and acquaintances amongst those living in other regions.

Moreover, in order to increase the probability of realizing relocation, as well as providing a diverse range of detailed information about the relocation destination, it is necessary to facilitate the sale of owner-occupied houses in the metropolitan areas.

In addition, based on these implications, this study has pointed out, using examples, the possibility that interaction between those living in the three major metropolitan areas and those living in other regions will be important in promoting migration.

Following on from this analysis, this paper discussed the activation of endogenous employment creation in regions outside the three major metropolitan areas. The implications derived from this are as follows.

Firstly, it was ascertained that the companies which value migrants highly are those which have the prioritization of business and which are aiming to achieve an expansion in scale and add value to products/services as their management strategy. Moreover, the migrants who are valued highly by companies are those in their 30s or 50s, who are in managerial posts, who graduated from vocational college, and who have been hired mid-career.

Consequently, there is the potential to be able to activate endogenous employment creation by promoting "matchmaking" between companies with these kinds of management strategy and migrants in general, as well as promoting migration by people with the aforementioned attributes.

It was also ascertained that the following types of company wish to employ migrants in the future: companies which responded that the "business sense that differs from that of personnel from within the local prefecture" and "management ability" of migrants are useful, companies that have employed a large number of "migrants from metropolitan areas," and companies that have a "core personnel deficiency."

Accordingly, there is a possibility that supplying migrants to the aforementioned types of company will activate endogenous employment creation. Moreover, if we interpret this with reference to the attributes of migrants, it suggests that migrants with business sense that differs from that of personnel from within the local prefecture, migrants with experience of working in metropolitan areas, and migrants who can become core personnel are required, so it would seem that it is important to implement some kind of "matchmaking" in regard to such migrants.

This brings to a close the conclusions drawn from this study. If it were possible to promote migration to regions outside the three major metropolitan areas by means of the aforementioned methods, it is likely that this would lead to the reduction or resolution of the problem of population decline in those regions, as well as reducing economic disparities between them and the three major metropolitan areas. Moreover, this study suggests that migrants have the potential to contribute to the activation of endogenous employment creation in regions outside the three major metropolitan areas, so it is possible that one could

expect the promotion of migration to resolve or reduce economic disparities through this kind of effect.

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